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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/588,779	08/08/2006	Naoki Yamaguchi	060599	4652

23850 7590 06/24/2008

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EXAMINER	
CERNOCH, STEVEN MICHAEL	
ART UNIT	PAPER NUMBER
3752	
MAIL DATE	DELIVERY MODE
06/24/2008	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No.	Applicant(s)	
	10/588,779	YAMAGUCHI ET AL.	
	Examiner	Art Unit	
	STEVEN CERNOCH	3752	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *08 August 2006*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-8* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-8* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on *08 August 2006* is/are: a)☒ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☒ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☒ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date *8/8/2006, 3/10/2008*.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

DETAILED ACTION

Double Patenting

All claims of this application conflict with all claims of Application No. 10/588,437, Application No. 10/588758 and Application No. 10/588,729. 37 CFR 1.78(b) provides that when two or more applications filed by the same applicant contain conflicting claims, elimination of such claims from all but one application may be required in the absence of good and sufficient reason for their retention during pendency in more than one application. Applicant is required to either cancel the conflicting claims from all but one application or maintain a clear line of demarcation between the applications. See MPEP § 822.

The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. A nonstatutory obviousness-type double patenting rejection is appropriate where the conflicting claims are not identical, but at least one examined application claim is not patentably distinct from the reference claim(s) because the examined application claim is either anticipated by, or would have been obvious over, the reference claim(s). See, e.g., *In re Berg*, 140 F.3d 1428, 46 USPQ2d 1226 (Fed. Cir. 1998); *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422

F.2d 438, 164 USPQ 619 (CCPA 1970); and *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) or 1.321(d) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent either is shown to be commonly owned with this application, or claims an invention made as a result of activities undertaken within the scope of a joint research agreement.

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

All claims provisionally rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over all claims of copending Application No. 10/588,437, Application No. 10/588758 and Application No. 10/588,729. Although the conflicting claims are not identical, they are not patentably distinct from each other because the claims in the cited applications claim the same apparatus and methodology and only differ through classification.

This is a provisional obviousness-type double patenting rejection because the conflicting claims have not in fact been patented.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

The factual inquiries set forth in *Graham* **v.** *John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

Claims 1, 2, 5 and 7 are rejected under 35 U.S.C. 103(a) as being unpatentable over Jeffries et al (US Pat No 5,221,050) in view of Coffee et al. (US Pat No 6,595,208).

Re claims 1 and 2, Jeffries et al. shows an electrostatic device (Fig. 7) configured and disposed to electrostatically charge and dispense a liquid composition from a supply to a point of dispense, wherein the device comprises: an actuator (column 10, line 8); a high voltage generator (column 7, lines 5-13) to provide a high voltage; a power source (Fig. 7, 96) to activate said actuator and said high voltage generator; a

reservoir (column 5, line 48) to contain the supply of said liquid composition; and a nozzle (column 6, line 57) to dispense the liquid composition, said nozzle being disposed at the point of dispense; and wherein the reservoir is configured to provide a removable cartridge (Fig. 5, 58), said reservoir being deformable according to inner pressure (column 5, line 48); a switch for manipulating the power source (Fig. 7, 102 &106).

Jeffries et al. does not show a dispensing unit comprising: a suction pump in immediate upstream relation with the reservoir for supplying the liquid composition from the reservoir, said pump being mechanically connected to said actuator to be driven thereby; an emitter electrode to electrostatically charge the liquid composition, the emitter electrode being electrically connected to said high voltage generator; and a selector for providing a spraying mode and a dripping mode selectively in response to the switch being manipulated; wherein the dripping mode is such that said pump is alone actuated to dispense the liquid composition out through the nozzle absent electrical charge, and wherein the spraying mode is such that said pump as well as the emitter electrode are simultaneously activated to dispense the liquid composition out through the nozzle with the liquid composition being electrically charged at the emitter electrode prior to exiting the nozzle.

However Coffee et al. teaches a dispensing unit comprising: a suction pump in immediate upstream relation with the reservoir for supplying the liquid composition from the reservoir (column 2, lines 55-58 and lines 66-67 to column 3, lines 1-2), said pump

being mechanically connected to said actuator to be driven thereby; an emitter electrode (abstract, lines 1-12) to electrostatically charge the liquid composition, the emitter electrode being electrically connected to said high voltage generator and a selector (Fig. 7, 78) for providing a spraying mode and a dripping mode (column 11, lines 27-33) selectively in response to the switch being manipulated; wherein the dripping mode is such that said pump is alone actuated to dispense the liquid composition out through the nozzle absent electrical charge, and wherein the spraying mode (column 6, lines 51-55) is such that said pump as well as the emitter electrode are simultaneously activated to dispense the liquid composition out through the nozzle with the liquid composition being electrically charged at the emitter electrode prior to exiting the nozzle.

Therefore it would have been obvious to one of ordinary skill in the art at the time of the invention to have the motivation to modify the sprayer of Jeffries et al. with the pump and electrode of Coffee et al. to provide a steady flow of fluid (column 2, lines 57-58) and to produce a charged comminuted material (abstract, lines 2-3) along with the dual modes to produce a metered does where necessary (column 11, line 32).

Re claim 2, Jeffries et al. shows wherein said device includes a housing (Fig. 7, 80) which carries said actuator, said high voltage generator, said power source, said switch, and said selector.

Re claim 5, Jeffries et al. shows wherein said housing is formed on its exterior with an indicator which indicates which one of said dripping mode and said spraying mode is selected (column 4, line 68 to column 5, lines 1-3).

Re claim 7, Jeffries et al. does not show wherein said spraying mode is arranged to start activating said pump after a delay from activating said high voltage generator.

However Coffee et al. does teach wherein said spraying mode is arranged to start activating said pump after a delay from activating said high voltage generator (column 3, lines 35-41)

Therefore it would have been obvious to one of ordinary skill in the art at the time of the invention to have the motivation to modify the sprayer of Jeffries et al. with the delay of Coffee et al. to allow a buildup to occur (column 3, lines 40-41).

Claims 3-4 are rejected under 35 U.S.C. 103(a) as being unpatentable over Jeffries et al (US Pat No 5,221,050) in view of Coffee et al. (US Pat No 6,595,208) as applied to claim 2 above, and further in view of Westerweck et al. (US Pub No 2004/0057720).

Re claim 3, Jeffries et al. does not show wherein said selector is exposed on the exterior of said housing to be manipulated by the user's finger, said selector being movable between a dripping position defining said dripping mode and a spraying position defining said spraying mode, said selector surrounding said switch in immediately adjacent relation thereto and rotatable about an axis between said dripping position and said spraying position.

However Westerweck et al. does teach wherein said selector (Fig. 4, 20 & 22) is exposed on the exterior of said housing to be manipulated by the user's finger, said selector being movable (paragraph 0027, lines 3-4) between a dripping position defining said dripping mode and a spraying position defining said spraying mode, said selector surrounding said switch (Fig. 4, 22) in immediately adjacent relation thereto and rotatable about an axis between said dripping position and said spraying position.

Therefore it would have been obvious to one of ordinary skill in the art at the time of the invention to have the motivation to modify the sprayer of Jeffries et al. with the switches of Westerweck et al. to reduce the amount of real estate required by the switch (paragraph 0007).

Re claim 4, Jeffries et al. does not show wherein said selector has a lock position which prohibits said motor and the emitter electrode from being activated.

However Westerweck et al. does show wherein said selector has a lock position which prohibits said motor and the emitter electrode from being activated (Paragraph 0028, lines 5-8).

Therefore it would have been obvious to one of ordinary skill in the art at the time of the invention to have the motivation to modify the sprayer of Jeffries et al. with the switch lock of Westerweck et al. to assist in capturing the switch (paragraph 0030, lines 1-5).

Claim 6 is rejected under 35 U.S.C. 103(a) as being unpatentable over Jeffries et al (US Pat No 5,221,050) in view of Coffee et al. (US Pat No 6,595,208) as applied to claim 1 above, and further in view of Cooper et al. (US Pat No 5,704,554).

Re claim 6, Jeffries et al. does not show wherein said selector is of a pressure-responsive type which is actuated by said switch to give said dripping mode in response to said switch handle being pressed to a first extent, and give said spraying mode in response to said switch being pressed to a second extent greater than said first extent.

However Cooper et al. does teach wherein said selector is of a pressure-responsive type (column 15, lines 39-44).

Therefore it would have been obvious to one of ordinary skill in the art at the time of the invention to have the motivation to modify the sprayer of Jeffries et al. with the pressure switch of Cooper et al. to prevent arcing from the electrode (column 15, lines 42-44).

Claim 8 is rejected under 35 U.S.C. 103(a) as being unpatentable over Jeffries et al (US Pat No 5,221,050) in view of Coffee et al. (US Pat No 6,595,208) as applied to claim 1 above, and further in view of Doebler et al. (US Pub No 2002/0100815).

Re claim 8, Jeffries et al. does not teach wherein said spraying mode is arranged to include monitoring of the high voltage output from said high voltage generator and to cease activating said high voltage generator and said pump when said monitored high voltage output exceeds a critical level.

However Doebler et al. does teach wherein said spraying mode is arranged to include monitoring of the high voltage output from said high voltage generator and to cease activating said high voltage generator and said pump when said monitored high voltage output exceeds a critical level (paragraph 0043, lines 3-20).

Therefore it would have been obvious to one of ordinary skill in the art at the time of the invention to have the motivation to modify the sprayer of Jeffries et al. with the voltage monitor of Doebler et al. in order to control any errors (paragraph 0043, lines 11-20).

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to STEVEN CERNOCH whose telephone number is (571)270-3540. The examiner can normally be reached on IFP.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Len Tran can be reached on (571)272-1184. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/S. C./

Examiner, Art Unit 3752

/Len Tran/

Supervisory Patent Examiner, Art Unit 3752